

ABSTRACT

A pattern inspection apparatus and method that uses multiple images in a pattern recognition process used to detect defects in an object being inspected is disclosed. A user is provided with multiple image selection windows allowing the 5 user to select multiple desired images from the object to form a pattern to be recognized within the object. The multiple desired images will be substantially free from undesired features of the object. Once the multiple desired images are selected, the spatial relationship between them is determined and used to learn the pattern to be recognized. The spatial relationship between the desired images 10 further filters out undesired features. The pattern to be recognized is used in a subsequent pattern recognition analysis. Since the pattern to be recognized includes only desired images and their relationship, undesired features that could corrupt the pattern recognition analysis are not present during the analysis.